METHOD AND SYSTEM OF EFFICIENT PACKET REORDERING

Abstract

A method and system is provided to efficiently order packets received over a network. The method detects breaks in sequences for one or more packet flows by detecting out-of-sequence packets and enters the segment of sequential packets into a separate memory area, such as a linked list, for a particular flow. A transmission queue and reorder table is used to record the beginning sequence number for each segment. The transmission queue is consulted to locate the segment beginning with the lowest packet sequence number for a flow. The packets associated with the segment are transmitted in order. The transmission queue is then repeatedly searched for the next lowest packet sequence number for transmission of the associated packet chain until the transmission queue is emptied.